



Year 2004
Air Quality Division

*ANNUAL AIR EMISSIONS INVENTORY QUESTIONNAIRE
For Facilities Permitted to Operate a Crushing & Screening Plant*

Instructions

The 2004 Annual Emissions Inventory Questionnaire includes 4 forms that are required to be completed and submitted to the Air Quality Division. Instructions for each form are included below. Upon completion, submit the forms along with the signature by the Responsible Official of the facility within 90 days of receipt of a letter from the Department.

FORM 1: Facility General Information

SECTION I thru III: Complete all fields as requested.

FORM 2: Equipment, Stack & Location Data

Equipment Data: List all the on-site equipment along with the Authorization To Operate (ATO) number where available. Indicate, if not available.

Stack Data: Provide details of each stack.

Location Data: If the portable equipment was moved from one location to another, list the dates and the county it was operated during the year 2004.

Once data is inputted the formulas are set to complete the calculations. Therefore, do not move or change any of the fields or columns.

FORM 3A: Emissions Data - Point & Fugitive Emissions

Enter the quantity, amount processed (tons/hr) and the total hours operated for each of the different processes.

FORM 3B: Emissions Data - Generator Emissions

Based on the type of fuel used, (Gasoline, Diesel, or Natural Gas/Liquid Propane), choose the appropriate table to input the generator horsepower and hours of operation during the calendar year 2004.

FORM 4: Summary & Certification

A summarization of all the emissions by each pollutant will be listed within this form. All reports submitted to the Department should be certified true and accurate by the Responsible Official of the facility. This person is the owner or operator of the facility. If there is a change of the Responsible Official of the facility, please notify the Department with an additional letter stating so.

The completed questionnaire should be submitted to the following address:

**Arizona Department of Environmental Quality
Attention: Darlene Celaya, Emission Inventory Team
Air Quality Division, Compliance Section 3415A-3
1110 West Washington Street
Phoenix, AZ 85007**

If you have any question or have difficulty completing this form, please contact Darlene Celaya at (602) 771-7662.

FORM 1: FACILITY GENERAL INFORMATION**YEAR 2004****SECTION I: *Plant Identification & Mailing Information***

Customer Name: _____

Place Name: _____ Place ID: _____

Mailing Address: _____ City: _____ State: _____ Zip: _____

County: _____

Phone: _____ Fax: _____

Permit Number: _____ General Permit: Yes No

SECTION II: *EI Contact*

EI Contact Name: _____ Title: _____

Telephone: _____ Fax: _____

SECTION III: *Confidential Request*

Pursuant to Arizona Revised Statutes §49-432 and §49-201, do you claim the Emissions Inventory data submittal confidential. If yes include which portions of the inventory are confidential along with a brief explanation:

Yes ☐
No ☐

FORM 2: EQUIPMENT, STACK, & LOCATION DATA
YEAR 2004
Equipment Data

Equipment Type	Equipment ID	ATO #	Rated Capacity	Hours Operated

Stack Information

	Stack #1	Stack #2	Stack #3
Equipment Name			
Height (feet)			
Diameter (feet)			
Velocity (feet/second)			
Exhaust Gas Temperature (F)			
Flow Rate (actual cubic feet per minute)			

Operation Location

Date		County of Operation
From	To	

FORM 3A: EMISSIONS DATA - POINT & FUGITIVES
YEAR 2004

Source	(1) Quantity	(2) Amount Processed tons/hour	(3) Hours Operated hours/year	Pollutant	(4) Emission Factor pounds/ton/unit	Emissions = (1)x(2)x(3)x(4)/2000 tons/year
Batch drop operations				PM10	0.00011	
				PM	0.00022	
Loading feed hopper				PM10	0.000055	
				PM	0.00011	
Pneumatic loading of lime silo				PM10	0.11	
				PM	0.22	
Lime transfer onto conveyor belts				PM10	0.000048	
				PM	0.000096	
Crushers				PM10	0.00059	
				PM	0.00118	
Screening				PM10	0.00084	
				PM	0.00168	
Fine screening				PM10	0.0021	
				PM	0.0042	
Stackers				PM10	0.000055	
				PM	0.00011	
Conveyor transfer points				PM10	0.000048	
				PM	0.000096	

Source	(1) No. of Piles	(2) Hours Stored hrs/year	Pollutants	(3) Emission Factor pounds/hour/acres	Emissions = (1)x(2)x(3)/2000 tons/year
Fugitive Emissions - Storage Piles			PM10	0.0047	
			PM	0.0094	

Source	(1) Vehicle Miles Traveled in 2004 miles	Pollutants	(2) Emission Factor pounds/VMT	Emissions = (1)x(2)/2000 tons/year
Fugitive Emissions - Haul Roads		PM10	0.19	
		PM	0.38	

FORM 3B: EMISSIONS DATA - GENERATOR EMISSIONS
YEAR 2004
FUEL - GASOLINE
Conversion Number - 1 kw = 1.3410 horsepower

Generator #1					Generator #2			
Pollutants	(1) Max. Capacity horsepower	(2) Operational Hours hours/year	(3) Emission Factor pounds/hp-hour	Emissions = (1)x(2)x(3)/2000 tons/year	(4) Max. Capacity horsepower	(5) Operational Hours hours/year	(6) Emission Factor pounds/hp- hour	Emissions = (4)x(5)x(6)/2000 tons/year
Particulate Matter <10 Microns (PM10)			0.00072				0.00072	
Particulate Matter (PM)			0.00072				0.00072	
Carbon Monoxide (CO)			0.44				0.44	
Volatile Organic Compounds (VOC)			0.022				0.022	
Sulfur Oxides (SOx)			0.00059				0.00059	
Nitrogen Oxides (NOx)			0.011				0.011	

FUEL - NATURAL GAS OR LIQUID PROPANE GAS

Generator #1					Generator #2			
Pollutants	(1) Max. Capacity horsepower	(2) Operational Hours hours/year	(3) Emission Factor pounds/hp-hour	Emissions = (1)x(2)x(3)/2000 tons/year	(4) Max. Capacity horsepower	(5) Operational Hours hours/year	(6) Emission Factor pounds/hp- hour	Emissions = (4)x(5)x(6)/2000 tons/year
Particulate Matter <10 Microns (PM10)			0.0000726				0.0000726	
Particulate Matter (PM)			0.0000726				0.0000726	
Carbon Monoxide (CO)			0.0029				0.0029	
Volatile Organic Compounds (VOC)			0.000842				0.000842	
Sulfur Oxides (SOx)			0.00000435				0.00000435	
Nitrogen Oxides (NOx)			0.0206				0.0206	

FORM 3B: EMISSIONS DATA - GENERATOR EMISSIONS

YEAR 2004

FUEL - DIESEL CAPACITY - Greater Than 600 Horsepower

Generator #1					Generator #2			
Pollutants	(1) Max. Capacity horsepower	(2) Operational Hours hours/year	(3) Emission Factor pounds/hp-hour	Emissions = (1)x(2)x(3)/2000 tons/year	(4) Max. Capacity horsepower	(5) Operational Hours hours/year	(6) Emission Factor pounds/hp- hour	Emissions = (4)x(5)x(6)/2000 tons/year
Particulate Matter <10 Microns (PM10)			0.0007				0.0007	
Particulate Matter (PM)			0.0007				0.0007	
Carbon Monoxide (CO)			0.0055				0.0055	
Volatile Organic Compounds (VOC)			0.0007				0.0007	
Sulfur Oxides (SOx)			0.0065				0.0065	
Nitrogen Oxides (NOx)			0.024				0.024	

FUEL - DIESEL CAPACITY - Less Than or Equal to 600 Horsepower

Generator #1					Generator #2			
Pollutants	(1) Max. Capacity horsepower	(2) Operational Hours hours/year	(3) Emission Factor pounds/hp-hour	Emissions = (1)x(2)x(3)/2000 tons/year	(4) Max. Capacity horsepower	(5) Operational Hours hours/year	(6) Emission Factor pounds/hp- hour	Emissions = (4)x(5)x(6)/2000 tons/year
Particulate Matter <10 Microns (PM10)			0.0022				0.0022	
Particulate Matter (PM)			0.0022				0.0022	
Carbon Monoxide (CO)			0.0067				0.0067	
Volatile Organic Compounds (VOC)			0.0025				0.0025	
Sulfur Oxides (SOx)			0.002				0.002	
Nitrogen Oxides (NOx)			0.031				0.031	

FORM 4: SUMMARY & CERTIFICATION**YEAR 2004**

Total all the emissions for each pollutant and enter in the table below.

Pollutant	Tonnage (tons per year)
Particulate Matter (PM)	
Particulate Matter less than 10 microns (PM10)	
Nitrogen Oxides (NOx)	
Sulfur Oxides (SOx)	
Volatile Organic Compounds (VOC)	
Carbon Monoxide (CO)	

Certification of Truth & Accuracy

I certify that I have knowledge of the facts set forth in this questionnaire, and that the same are true, accurate and complete to the best of my knowledge and belief, and that all information not identified by me as confidential in nature shall be treated by the Arizona Department of Environmental Quality as public record.

Signature of Responsible Official: _____ Date: _____

Print Name: _____

Title: _____